

### **REMARKS**

Reconsideration of the subject application with for the specification presently pending.

By the present amendment, a substitute specification has been submitted. Claims 1-95 have been cancelled. Claims 96-139 have been added. The pending abstract has been cancelled and a new one has been submitted.

Based on the foregoing amendments and the following remarks, the application is deemed to be in condition for allowance, and action to that end is respectfully requested.

#### **I. Objection to the Specification**

The Examiner objected to the specification for absence of headings therein and because of several formal errors therein. The Examiner further requested to type the specification to make reading of the specification and entry of amendments more easily.

As noted above, a substitute specification has been submitted. The substitute specification has proper spacing between the lines and contains

heading and other amendments correcting formal error therein. A marked-up copy of the original specification is also enclosed.

## **II. Rejection of Claims**

### **IIa. Rejection under 35 U.S.C. §112**

The Examiner rejected claims 1-12, 25-42, and 84-95 under 35 U.S.C. §112, second paragraph, for allegedly being indefinite. As noted above, claims 1-12, 25-42, and 84-95 have been cancelled, together with claims 13-24 and 43-83. It is respectfully submitted that claims 96-139, which have been added by the present amendment, comply with all of the requirements of 35 U.S.C. §112.

It is further respectfully submitted that claims 96-101 are in condition for allowance. Claims 96-101 correspond in scope to claims 33-35, 41, and 90-91 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. §112, second paragraph, and to include all of the limitations of the base claim and any intervening claims. Accordingly, claims 96-101, which are claims 33-35, 41 and 90-91 so rewritten, are in condition for allowance.

## **Iib. Rejection over the Prior Art**

The Examiner rejected claims 1-12, 25-32, 36-39, 42, 84-89, and 92-95 under 35 U.S.C §103(a) as being unpatentable over Rokugawa et al., U.S. Patent No. 5,554,811 (Rokugawa) in view of Guinn, U.S. Patent No. 3, 572, 552 (Guinn). It is respectfully submitted that claims 102-139 are patentable over the cited references.

Specifically, claim 102 recites a reservoir for a to-be-metered liquid, and a micro-diaphragm pump connected with reservoir and operatively communicating, via an open-jet proportioner, with the proportioning port (leading to a pipette). The foregoing elements are not disclosed in Rokugawa. In Rokugawa, the reservoir 56 is not for the metered liquid but is a water-storage tank containing washing water such as pure water. The three-way directional control valve 53 is connected to a drain tank 58 for storing drain water from the lower pump chamber LO after its washing (column 5, line 60 to column 6, line 2). So water from the reservoir 56 is used to wash pump chamber LO and is discharged thereafter in a drain tank 58.

Actuator 41 of sampling pump 16 can be deflected in opposite directions. In one direction, the actuator 41 causes the specimen pipetting probe 13a to

suck the specimen into it. In the other direction, the actuator causes the specimen pipetting probe 13a to discharge the specimen (column 9, lines 5 to 18).

According to table 1, the discharge quantity depends from the driving voltage of actuator 41. Pump 16 neither can pump liquid from probe 13a to reservoir 56 nor liquid from reservoir 56 to probe 13a. The pump 16 can also not fill an open-jet proportioner with a liquid from reservoir 56.

Guinn discloses a diaphragm dispenser for fluids which includes plural charge-receiving chambers having respective variable upper extremities. The latter are defined by a diaphragm means which is selectively deformable, and in desired degrees, within said chambers as fluid pressure is applied to the upper side of the diaphragm. This is accomplished in one form of the invention by a plunger and, preferably, the same actuates a given hydraulic fluid exposed between the diaphragm and the plunger.

The chambers are only connected via bores 18 to needles 21. Exclusively through the bores 18 liquid is drawn into the chambers and expelled therefrom.

Guinn simply discloses to expel the fluid from the system. Guinn does not disclose expelling the fluid in a jet or beam. It does not seem to be possible to expel the fluid in a jet or beam by manually pushing the syringe piston.

Guinn does not disclose an open-jet proportioner. Guinn especially does not disclose an open-jet proportioner having an entrance (which can be connected to the exit of a micro-diaphragm pump or to a reservoir) and which is provided with an exit (which can be connected to a proportioning port).

Since all claim limitations must be considered in an obviousness determination, and since the combination of Rokugawa and Guinn fails to disclose several of the important and recited elements and features of independent claim 102, it is respectfully submitted the present invention, as defined by claim 102, is not rendered obvious by the combination of Rokugawa and Guinn and is, therefore, patentably defines over said combination.

It is respectfully submitted that a *prima facie* case of obviousness has not been made.

Under MPEP § 2143 *prima facie* case of obviousness requires that three basic criteria be met.

First, there must be some suggestion or motivation, either in the references or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all of the claim limitation.

It is respectfully submitted that the third criterium of *prima facie* obviousness has not been met.

It is further respectfully submitted that the first criterium of *prima facie* obviousness also has not been established.

“obviousness cannot be established by combining the teachings of the prior art to produce the claimed invention, absent some teaching or suggesting supporting the combination. Under section 103, teachings of references can be combined only if there is some suggesting or incentive to do so.”

*In re Fritch*, 23 U.S.P.Q. 2d 1780, 1783 (Fed. Cir 1992) (footnote omitted) (emphasis in original). See also *In re Sernaker*, 217 U.S.P.Q. 1, 6 (Fed. Cir. 1983); *SmithKline Diagnostics, Inc. v. Helena Laboratories Corp.*, 8 U.S.P.Q. 2d 1397, 1399 (Fed. Cir. 1989); *In re Fine*, 5 U.S.P.Q. 2d 1596, 1598 (Fed. Cir. 1988).

There is no suggestion, incentive or motivation in the cited references for the combination on which the Office Action relies. A statement that it would

have been obvious to one skilled in the art to make modifications to the references is not sufficient to establish a *prima facie* case of obviousness. MPEP §2143.01 relying on Ex Parte Levengood, 28 U.S.P.Q. 2d 1300 (Bd. Pat. App. & Inter. 1993). In order to establish a *prima facie* case of obviousness, “it is necessary for the Examiner to present evidence, preferably in the form of some teaching, suggesting incentive or influence in the prior art, or in the form of generally available knowledge, that one having ordinary skill in the art would have been led to combine the relevant teachings.” Id. At 1301 (emphasis in original).

The Federal Circuit has held that a claimed invention was not obvious, where “[c]onspicuously missing from [the] record as any *evidence*, other than the PTO’s speculation (if it be called evidence) that one skilled in the art would have been motivated to make the modification of the prior art “necessary to arrived at the claimed invention. In re Jones 21 U.S.P.Q. 2d 1941 (Fed. Cir. 1992).

Ex Parte Clapp, 227 U.S.P.Q. 972, 973 (Bd. Pat. App & Inter. 1985) requires that when the references do not suggest the invention “. . . the Examiner must present a convincing line of reasoning as to why the artisan

would have found the claimed invention to have been obvious in light of the teaching of the references.” No such line of reasoning is seen in the Office Action.

Further, the Office Action, lacks any *evidence* that one of ordinary skill in the art would have been motivated to combine the references.

The Court of Appeals for the Federal Court clearly stated:

It is impermissible to use the claimed invention as an instruction manual or template to piece together the teaching of the prior art so that the claimed invention is rendered obvious.

*In re Fritch*, 23 U.S.P.Q. 2d 1780, 23 1780, 1783  
(Fed. Cir. 1992)

In the *In re Fritch* holding only confirmed a long established view that obviousness should not be read “into an invention on the basis of Applicant’s own statements”, that the prior art must be viewed “without reading into that art Appellant’s teachings”, and that that teachings of the prior should, “in and of themselves and without the benefits of Appellant’s disclosure (emphasis in the original text) make the invention as a whole, obviously.” *In re Sponnoble*, 160 U.S.P.Q. 237, 243 (CCPA 1969). It is respectfully submitted that the teachings of the prior art does not make the present invention obvious.



It is respectfully submitted that claim 102 would not obvious over Rokugawa and Guinn.

Claims 103-103 and 130-139 depend on Claim 102 and are allowable for the same reasons Claim 102 is allowable and further because of specific features recited therein which, when taken alone and/or in combination with features recited in Claim 102, are not disclosed or suggested in the prior art.

Claims 114 and 125 in many respects are similar to Claim 102 and rely for their patent ability on the same inventive features as claim 102, and are, therefore, allowable for the same reasons claim 102 is allowable.

Claims 115-124 and 126-129 depend on claims 114 and 125, respectively, and are also submitted to be allowable.

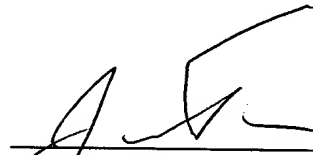
### **CONCLUSION**

In view of the foregoing, it is respectfully submitted that the application is in condition for allowance, and allowance of the application is respectfully requested.

Should the Examiner require or consider it advisable that the specification, claims and/or drawing be further amended or corrected in formal

respects, in order to place in case in condition for final allowance, the nit is respectfully requested that such amendment or correction be carried out by the Examiner's amendment and the case passed issue. Alternatively, should the Examiner feel that a personal discussion might be helpful in advancing this case to allowance, the Examiner is invited to telephone the undersigned.

Respectfully Submitted



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I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail and addressed to: Commissioner for Patents, Washington, DC 20231 on February 13, 2003.

